a few feet from the outside, and the rock is massive. The effect of weathering has been to split it up into loose blocks, which lie thickly scattered over the ground enclosed. The whole outside line being constructed of horizontal columns, forms a sort of natural cyclopian wall, much more capable of resisting the degrading influence of the weather than the massive inside; hence it might be expected that as they always protrude on a hillslope, the rock being disintegrated in the centre would slip down the hill, forming a heap or talus of rubbish below, and overwhelming the wall encircling the lower edge, but at the same time falling away from the wall of the upper edge, which, owing to its columnar structure, is able to keep its fragments together; and, in fact, this is what was observed. The upper wall of the more distant one, which stands out a prominent object on the summit of the ridge, is over 50 feet high, and presents a perfectly smooth wall face to the outside. As it stretches down the hillslope, which is here very steep, its height diminishes irregularly until it is lost in the heap of loose stones covering the lower wall and the whole inside.

The rock is hard and compact, of a light greenish grey colour, with much of the appearance, though without the ring, of phonolite. Near the outside, or in the columnar part, the rock is closer grained than in the centre, and has a distinct cleavage in a plane perpendicular to the length of the columns. It gelatinizes partially with hydrochloric acid, and the solution contains much soda and some sulphuric acid. It is therefore probable that both nepheline and nosean are present.

Another prominence on this side of the harbour is formed of precisely similar material. It is a round, greenish grey hill covered with phonolitic rock lying about in angular fragments, generally of a size to be easily lifted. The rock is very similar to that of the hills just described; and it seems to belong to the same class, differing from the others in the complete disappearance of the outside wall, large pieces of which lie scattered on the slope like portions of dislodged masonry.

It is to be remarked that in neither of these cases was there any distortion in the beds in which the phonolite occurred. The line of junction of the highest one with the augitic rock was very well shown, and specimens were obtained from it. For a few feet from the line of junction the basalt is considerably altered, the large crystals of augite and olivine disappearing as the line of junction is approached. This line is in general quite decided; there are many angular particles of the phonolite completely surrounded by the basalt, whereas basalt imbedded in phonolite was not observed. Further, the grain of this basalt, in immediate proximity to the junction, is very fine, becoming rapidly coarser, till the basalt at 10 feet from the junction has the porphyritic appearance which it presents at other parts of the hill. These two facts appear to point to the phonolite as being the more ancient of the two, and to the basalt as having flowed round it. There is no necessity for supposing that the portions of these phonolitic masses should be sections of cylinders; they may equally well be sections of domes.